

### **REMARKS**

The Office Action mailed March 23, 2007 rejected all the claims. This reply amends claims 1, 27, 28, 45, 71, 72, 89, 95, 98, 101, 117, 126, and 142, cancels claims 26, 70, 92, 94, 116, and 141, and adds claim 163. Applicants respectfully request reconsideration of the rejections in light of this reply.

#### **I. Request for examination of all claims**

The Office Action does not mention claims 141 or 142. As such, it appears these claims were not considered. Applicants respectfully request consideration of these claims. Applicants also note that any rejection of these claims would be new and, thus, would preclude making final any subsequent Office Action.

#### **II. Office Action**

Claims 1-5, 12, 14, 26-29, 31, 35, 44, 73, 75-76, 79, 89, 91-92, 94-95, 97-98, 100-104, 116-117, 120, 126-129 and 145 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,651,139 ("Ozeki"). Claims 6-8, 24-25, 30, 32-34, 36, 38, 40, 45-51, 53, 56, 58, 68-71, 73-85, 88, 106-107, 115, 118-119, 122, 131-132, 139, 140, 144, 147, 151, 155 and 159 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ozeki in view of U.S. Patent No. 5,544,319 ("Acton"). Claims 9, 15-23, 52, 59-67, 108, 111-113, 133, 136-138, 152-154, 156-158 and 160-162 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ozeki in view of Acton and further in view of U.S. Patent no. 6,658,210 ("Fee"). All these rejections are traversed for the following reasons.

#### **III. Independent claim 1**

Claim 1 stands rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,651,139 ("Ozeki"). This rejection is respectfully traversed.

Claim 1 defines a memory system comprising "a wavelength sensing mechanism connected to said controller arranged and configured to provide wavelength information to said controller with respect to an optical signal on said continuous optical path." Ozeki does not anticipate claim 1 at least because Ozeki does not teach or suggest this limitation.

Page 4 of the Office Action asserts that figure 3 and column 6, lines 31-36 of Ozeki disclose the above-quoted feature. This assertion is incorrect: none of these portions of Ozeki teach or suggest the above-quoted limitation of claim 1.

Figure 3 shows a bus interface (12) with a light signal level control unit. Column 6, lines 26-28 explains that this control unit changes the intensity of light transmitted. Specifically, this portion of Ozeki states "as shown in FIG. 3, a light signal level control unit 29 is installed in the level shifters 23, 26 so as to enable the communication of the signal with an arbitrary light intensity." This light intensity control unit bears no relation to and does not disclose the above-quoted limitation of claim 1.

Regarding lines 31-36 of column 6, this text teaches that "the type of the light signals is not limited to the intensity modulation of light, and naturally the polarization or wavelength of each light signal may be varied." Although this text teaches varying the wavelength of light, this text bears no relation to a "wavelength sensing mechanism." Thus, this cited section of Ozeki also does not disclose the above-quoted feature of claim 1.

No other portion of Ozeki has been cited or found to disclose the above cited limitation of claim 1. As a result, Ozeki does not anticipate claim 1. Accordingly, the rejection should be withdrawn.

#### IV. Independent claim 45

Claim 45 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Ozeki in view of U.S. Patent No. 5,544,319 ("Acton"). This rejection is respectfully traversed.

Claim 45 defines a computer system comprising "a wavelength sensing mechanism connected to said memory controller, for providing wavelength information to said memory controller with respect to an optical signal on said optical path." Neither Ozeki nor Acton, when viewed individually or in combination, teach or suggest this feature.

Page 7 of the Office Action asserts that figure 3 and column 6, lines 31-36 of Ozeki disclose the above-quoted feature. As explained above, this assertion is incorrect. As no other portion of Ozeki or Acton has been cited for or found to teach or suggest the above cited limitation of claim 45, these references do not render claim 45 unpatentable. Accordingly, the rejection should be withdrawn.

V. Independent claim 101

Claim 101 stands rejected under 35 U.S.C. § 102(e) as being anticipated by Ozeki. This rejection is respectfully traversed.

Claim 101 defines a method of operating a memory system comprising "providing wavelength information to said controller with respect to the optical signal on said optical path." Ozeki does not teach or suggest this limitation.

Page 4 of the Office Action asserts that figure 3 and column 6, lines 31-36 of Ozeki disclose the above-quoted feature. As explained above, this assertion is incorrect. As no other portion of Ozeki has been cited for or found to teach or suggest the above cited limitation of claim 101, Ozeki does not anticipate claim 101. Accordingly, the rejection should be withdrawn.

VI. Independent claim 126

Claim 126 stands rejected under 35 U.S.C. § 102(e) as being anticipated by Ozeki. This rejection is respectfully traversed.

Claim 126 defines a method of operating a memory system comprising "receiving wavelength information with respect to an optical signal on said optical path." Ozeki does not teach or suggest this limitation.

Page 4 of the Office Action asserts that figure 3 and column 6, lines 31-36 of Ozeki disclose the above-quoted feature. As explained above, this assertion is incorrect. As no other portion of Ozeki has been cited for or found to teach or suggest the above cited limitation of claim 126, Ozeki does not anticipate claim 126. Accordingly, the rejection should be withdrawn.

VII. Independent claim 89

Claim 89 stands rejected under 35 U.S.C. § 102(e) as being anticipated by Ozeki. This rejection is respectfully traversed.

Claim 89 defines an electro-optical converter for a memory system comprising "a wavelength sensing mechanism connected to said controller arranged and configured to provide wavelength information to said controller with respect to the optical signal." Ozeki does not teach or suggest this limitation.

Page 4 of the Office Action asserts that figure 3 and column 6, lines 31-36 of Ozeki disclose the above-quoted feature. As explained above, this assertion is incorrect. As no other

portion of Ozeki has been cited for or found to teach or suggest the above cited limitation of claim 89, Ozeki does not anticipate claim 89. Accordingly, the rejection should be withdrawn.

#### VIII. Independent claim 95

Claim 95 stands rejected under 35 U.S.C. § 102(e) as being anticipated by Ozeki. This rejection is respectfully traversed.

Claim 95 defines an electro-optical converter for a memory system comprising, "a wavelength sensing mechanism arranged and configured to provide wavelength information to said controller with respect to an optical signal on said continuous optical path." Ozeki does not teach or suggest this limitation.

Page 4 of the Office Action asserts that figure 3 and column 6, lines 31-36 of Ozeki disclose the above-quoted feature. As explained above, this assertion is incorrect. As no other portion of Ozeki has been cited for or found to teach or suggest the above cited limitation of claim 95, Ozeki does not anticipate claim 95. Accordingly, the rejection should be withdrawn.

#### IX. Independent claim 98

Claim 98 stands rejected under 35 U.S.C. § 102(e) as being anticipated by Ozeki. This rejection is respectfully traversed.

Claim 98 defines a memory system comprising an "optical data signal comprising a plurality of multiplexed optical channels, wherein at least one channel is bidirectional and at least one channel is unidirectional." Nothing has been cited to or found in the cited prior art that is comparable to this limitation of claim 98. As such, claim 98 is patentable over the cited prior art. Accordingly, the rejection should be withdrawn.

#### X. New independent claim 162

This amendment adds claim 162. Claim 162 is patentable at least because nothing has been cited to or found in the cited prior art that is comparable to the memory system defined by claim 162. Accordingly, the claim should be allowed.

#### XI. Dependent claims

Claims 2-9, 12, 14-25, 27-36, 38, 40, 44, and 151-154 are allowable at least because each one depends from claim 1, which is an allowable base claim. Claims 46-53, 56, 58-69, 71-82, 84, 88, and 155-158 are allowable at least because each one depends from claim 45, which is an

allowable base claim. Claim 91 is allowable at least because it depends from claim 89, which is an allowable base claim. Claim 97 is allowable at least because it depends from claim 95, which is an allowable base claim. Claim 100 is allowable at least because it depends from claim 98, which is an allowable base claim. Claims 102-108, 111-113, 115, 117-120, 122, and 159-162 are allowable at least because they depend from claim 101, which is an allowable base claim. Claims 127-133, 136-140, 142-145, and 147 are allowable at least because they depend from claim 126, which is an allowable base claim.

## XII. Conclusion

In view of this reply, Applicants believe the pending application is in condition for allowance. If there are any formal matters remaining, Applicants respectfully request Examiner to telephone the undersigned. If there are any additional fees associated with the filing of this reply, including fees required under 35 C.F.R. §§ 1.16 or 1.17, please charge them to deposit account no. 04-1073.

Dated: 6-25-07

Respectfully submitted,

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